



The search for the smallest particle of matter led scientists to develop new observation tools, such as very powerful microscopes. Scientific observations using these new tools led to the discovery of small paticles called atoms.

All matter is made up of these small particles or atoms. Atoms are always moving, but the movement of one atom is very hard to observe, because it is so small. Atoms are made up of smaller particles that are also in motion. Scientists have difficulty observing the actual movement of the particles that atoms are made of. Therefore, particle movement is more easily observed by noting changes caused by such motion. For example, while air cannot be seen, it often can be used to show particle motion.



er

arth

Heredity



Place an open bottle of perfume at one corner of a room. Get a friend to stand at the opposite corner of the room and time how long it takes for them to first smell the perfume. This shows that the perfume particles move along with the air particles. Now try using different kinds of perfume. Make a hypothesis prior to testing each brand. Did each kind of perfume move through the air at the same speed? If one kind moved faster or slower than the others, what do you think was the cause of the different speed? Is there a possible relationship between the kinds of perfumes you tested and the speed they moved through the room? Now design an experiment to test your hypothesis about how fast these particles move.







Print this page in Adobe Acrobat Format



Visit the <u>Utah State 7th Grade Integrated Science Core Curriculum Page</u>.

Updated June 14, 2000 by: <u>Glen Westbroek</u>

Science Home Page | Curriculum Home Page | Core Home Page | USOE Home Page

Copyright © by the Utah State Office of Education.